

Lessons from the crisis – asset allocation for sovereign funds and pension funds

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Presentation to the [CFA Chapter NL](#)

Tilburg, December 2nd, 2009

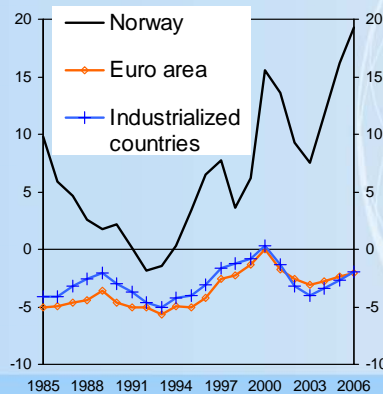
Asker, September 2009

Agenda

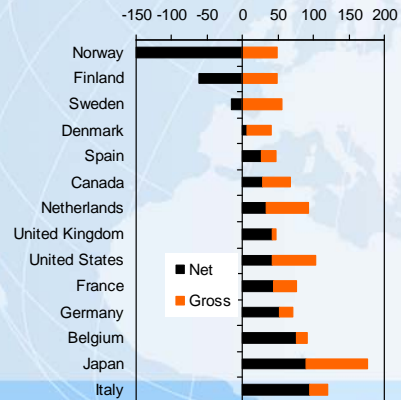
- **The Government Pension Fund - Global**
 - Fund rationale and governance
 - Strategic asset allocation
 - Framework for active management
 - Ethical guidelines, corporate governance
- **Extreme Market conditions and issues facing the funds.**
- **Lessons for long term investors.**

General government finances are strong in Norway ...

A. General government financial balances. 1985 - 2006. Per cent of GDP



B. Financial liabilities. 2006. Per cent of GDP

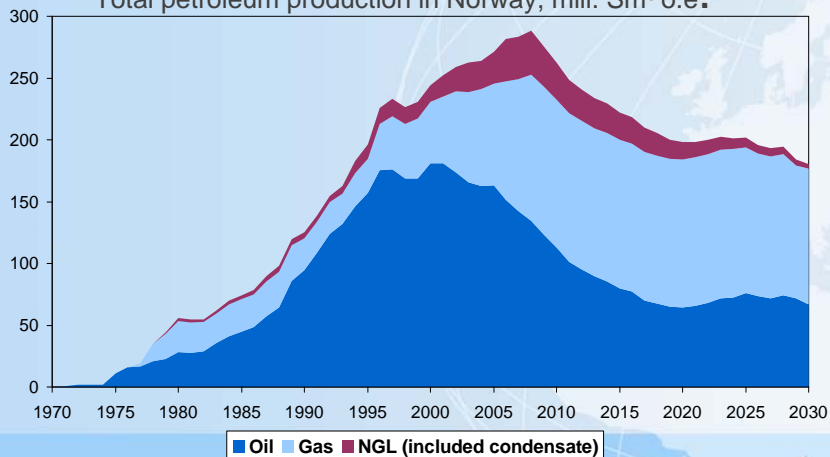


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... and will remain strong in the next decade due to significant revenues from oil and gas production

Total petroleum production in Norway, mill. Sm³ o.e.



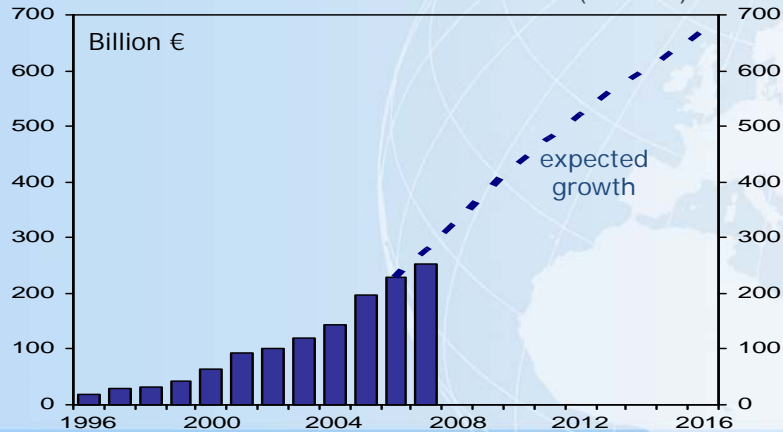
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Source: Norwegian Petroleum Directorate

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Europe's largest single owned asset pool, high growth

The Government Pension Fund's market value (nominal) 1996–2016e



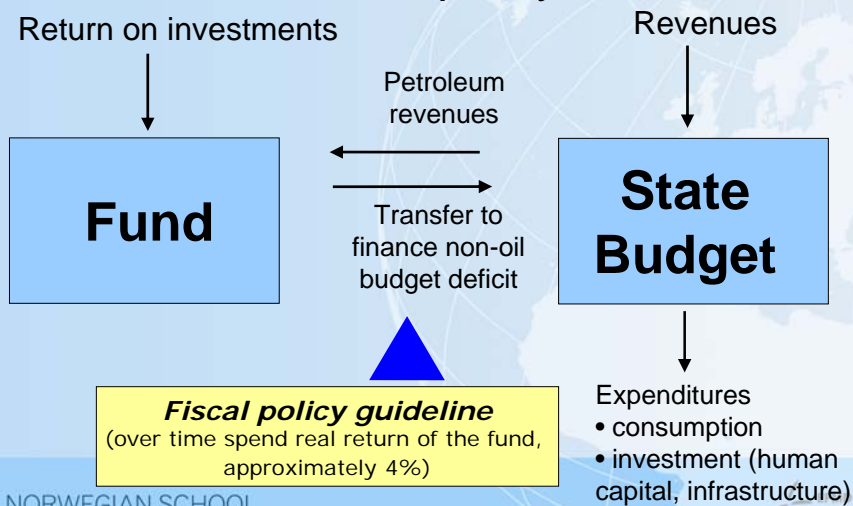
Source: Ministry of Finance, press conference on GPF White Paper 13 April 2007



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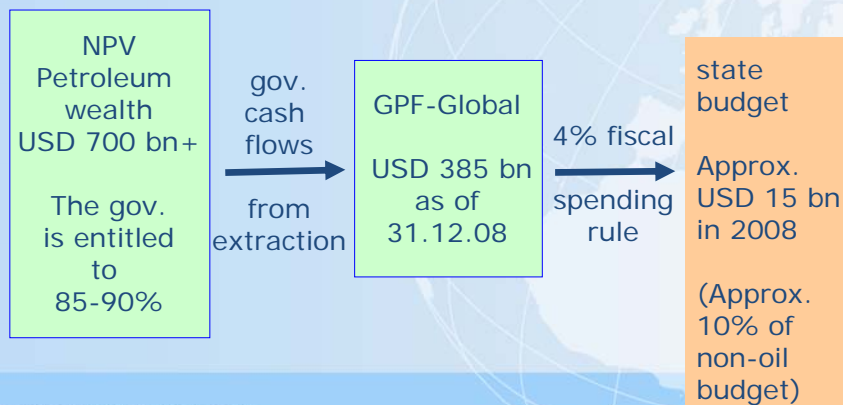
The Fund mechanism – integrated with fiscal policy



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Petroleum wealth is transferred into financial assets in the Government Pension Fund - Global



Very long investment horizon

- The real return of the fund can finance a **permanently** higher level of central government spending, helping finance the growing pension obligations of the state (pay-as-you-go scheme).
- Hence, the current fiscal guideline, which stipulates that the expected real return of the fund (4 %) be spent over the budget, implies an **indefinite** investment horizon.

Management roles:

- *Owner (State - Ministry of Finance)*
 - Decides investment strategy (strategic benchmark, rebalancing scheme, scope of active management, investment universe).
 - Monitors operational manager.
 - Develops ethical guidelines.
- *Operational manager (NBIM Subsidiary of Central Bank)*
 - Implements investment strategy.
 - Invests monthly inflows.
 - Runs active management programme.
 - Exercises fund's ownership rights.

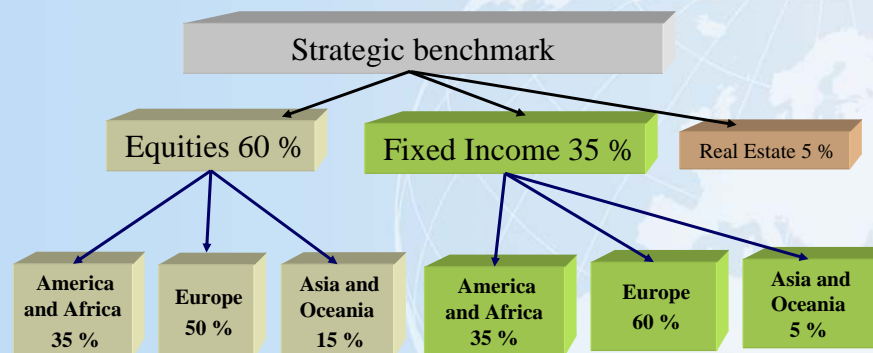
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Oil fund specific considerations

- “*Infinite*” investment horizon.
- Liabilities not clearly defined.
 - No outflows (yet).
 - No funding ratio requirement.
- Strong risk bearing capacity
 - Short term volatility of less concern to representative of sponsor (Ministry of Finance).
 - But public and political scrutiny
- “*Target*” real return around 4 %.

Policy Portfolio for the Pension Fund – Global



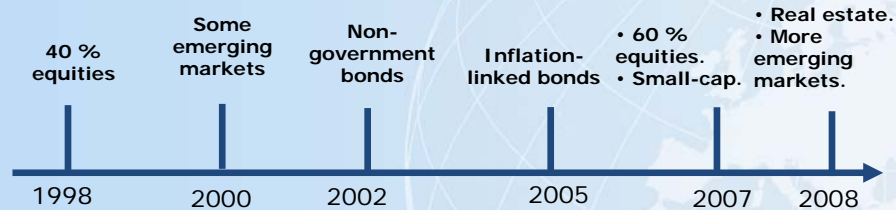
Equity index:

FTSE All-Cap Index
Approx. 7000 equities

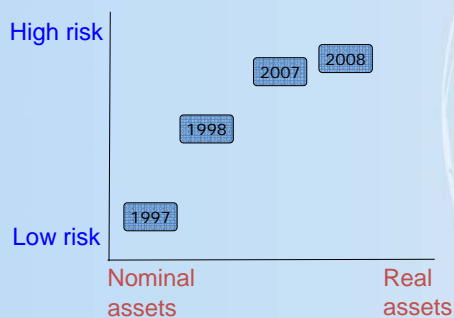
Fixed income index:

Lehman Brothers Global Aggregate/Global Real Government / Agency / Corporate / Securitized
Approx. 7500 bonds

Evolution of the policy portfolio



Investment strategy trend: from low risk & nominal assets towards higher risk & real assets



Main drivers

- Larger fund
- Long investment horizon
- Real expenditures funding
- Learning & building consensus
- Low risk-free returns

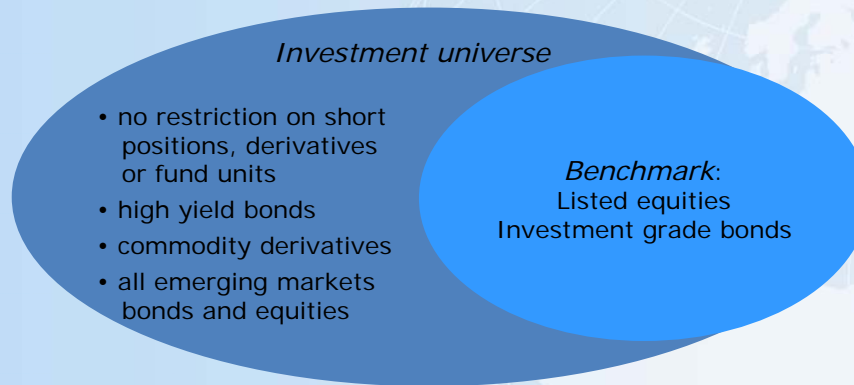
Current mandate not adapted to direct investments in real assets

- *Current management model and mandate best suited for:*
 - Frequently priced assets
 - Replicable benchmarks
 - Tracking error mandate
 - Evaluation based on excess return/risk
 - Markets where beta exposure is easily available
 - Small ownership shares
- *Private real assets investments characterized by:*
 - Less frequent pricing/assessments
 - No replicable benchmarks
 - Absolute return mandates
 - Alternative forms of performance evaluation
 - Beta exposure is not easily available and difficult to separate from alpha
 - Higher average ownership shares

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The investment universe gives significant degree of freedom for Norges Bank's active management



Risk budget:

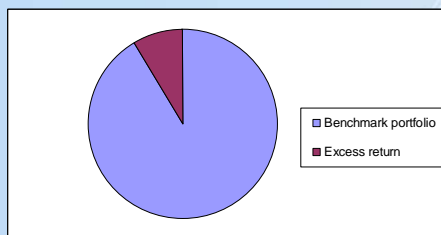
150 bp tracking error on total portfolio



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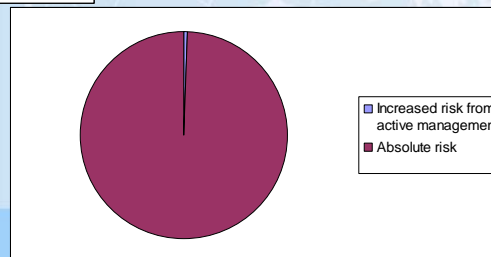


Up to 07, active management added to realized returns, has had small impact on total risk



Active management:

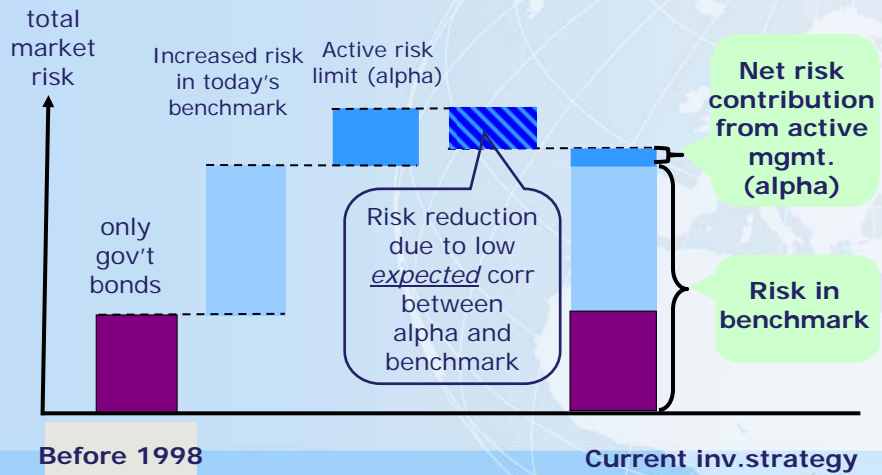
- About 8% of total return
- < 1 % of total risk



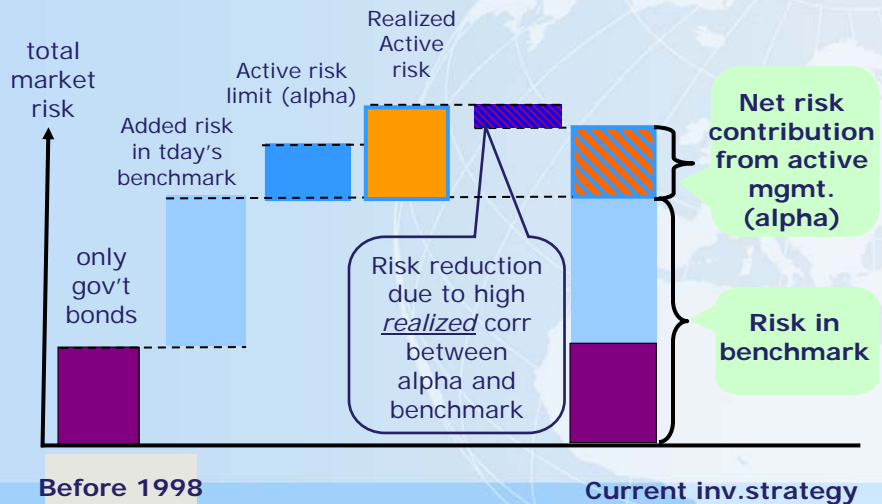
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The Fund's total risk should be dominated by the market risk of the benchmark portfolio



In down markets, active management contributes a large fraction of the Fund's total risk



Fund active management performance

Annual Alpha and T.E. in percent per year				
	Entire period	Last 5 years	Last 3 years	2008
Total portfolio				
Avg exc ret. per yr	-0.03	-0.57	-1.44	-4.22
T.E.	0.79	1.08	1.31	1.95
IR	-0.03	-0.53	-1.1	-2.17
Equity portfolio				
Avg exc ret. per yr	0.52	0.39	-0.22	-1.7
T.E.	1.01	1.09	1.24	1.74
IR	0.51	0.36	-0.18	-0.98
Fixed income portfolio				
Avg exc ret. per yr	-0.52	-1.4	-2.57	-6.67
T.E.	0.99	1.4	1.74	2.58
IR	-0.53	-1	-1.48	-2.58

Active Management performance

- Large losses to active management in crisis
 - small benefits in good time
- Worse performance for FI than Eq.
- Questions about
 - Benchmark choice
 - Systematic risk control
 - T.E. estimate
 - Performance measures and links to bonus
- Public scrutiny

Active Management issues

- Should the fund engage in active management
- What type of active management?
 - Tactical allocation
 - Security selection
 - Liquidity provision
- What risk budget?
 - Risk measurement
 - Systematic risk control
- How to measure & manage liquidity risk

Agenda

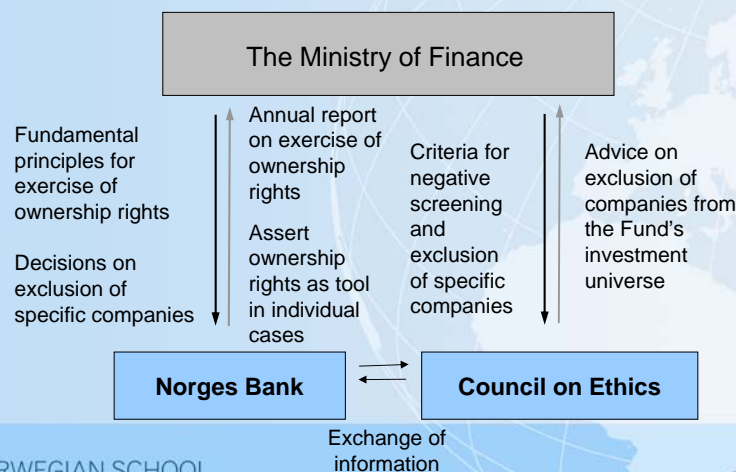
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Ethical guidelines and corporate governance

Two main ethical obligations:

- 1) Fiduciary duty: ensure sound financial returns so that future generations will benefit from the petroleum wealth.
- 2) Respect fundamental rights for those who are affected by the companies in which the Fund invests.
 - ✓ exercise ownership rights – corporate governance
 - ✓ avoid investments in companies whose practices constitute an unacceptable risk that the Fund is or will be complicit in grossly unethical activities

Application of the ethical guidelines



Exercise of ownership rights

- Goal of the ownership effort is to safeguard the (long-term) financial interests of the Pension Fund
- The principles governing the exercise of ownership rights are based on the UN Global Compact, the OECD Principles of Corporate Governance and the OECD principles for Multinational Enterprises
- Tools for exercising ownership rights
 - Public exercise of voting rights
 - Shareholder proposals
 - Direct interaction with target firm's management

Exclusion of companies

- Negative screening (products)
 - Weapon that through their normal use may violate fundamental humanitarian principles (e.g. cluster munitions and nuclear arms)
- Ad-hoc exclusion (production methods and conduct)
 - Serious violations of fundamental ethical norms (human rights incl. child labour, corruption, severe environmental damage)
 - Forward-looking assessment
- 29 excluded companies (as of 30.06.2009).

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Recent market disruptions

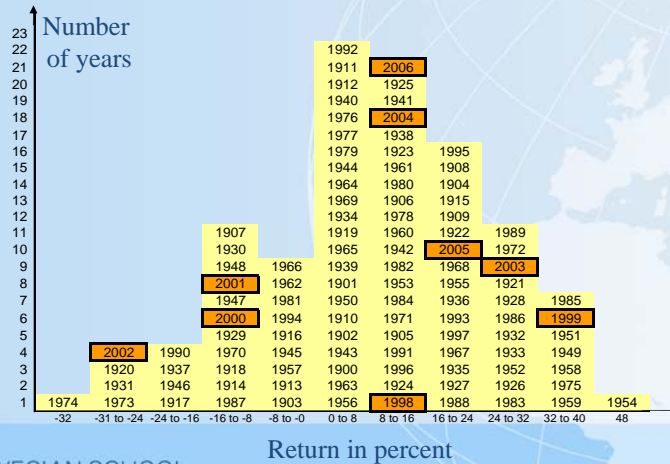
- Sub-prime crisis evolved into broader financial crisis.
- On top of that:
 - Falling house prices.
 - Commodity inflation and broader inflationary pressures persisted most of 2008.
- “Perfect storm” now affecting the real economy, resulting in lower expected economic growth rates (IMF World Economic Outlook, April 2008).
- Unwinding of some global macroeconomic imbalances, and the normalization of risk premia. Not entirely unexpected, but trigger and timing has been highly uncertain.

Stormy times highlight need for:

- Moderate real return expectations, also long term.
- Diversification across asset classes and regions.
- Better risk measurement and control (both passive and active risk), including better understanding of tail events and their probabilities.

GPF-Global already had some experience with volatile equities markets

Real return on a portfolio close to GPF-Global's equities benchmark



Staying the course

- Timing of policy allocation change (move from 40 to 60% equity starting in 2007) amplify negative performance
- Kept buying equity in 2008
- Most of the equity losses reversed in 2009

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Investment strategy: Further diversification into alternatives?

- Currently risk is concentrated in a few asset classes, mainly in stocks. Further enlargement of investment universe might be desirable.
- Lesson from the bear market 2000-2002:
 - Pension funds can not afford too concentrated equity market risk (which, turned out to be higher than many expected).
- Trend to seek all weather strategies (higher return and lower risk.)
 - Only diversification into alternatives can potentially deliver

Increasing allocation to alternatives?

- Ample supply
 - hedge funds, private equity, real estate, infrastructure, commodities, specialized sectors and investments styles, etc.
- *Caution:*
 - High growth and returns in 02-07 dependent of simultaneous strong (unsustainable) credit expansion.
 - Dependence on credit induce hidden built in correlation with credit (business) cycles
 - Diversification benefits overstated?
 - Increased correlations in markets down-turns.
 - Wide-spread sell-offs when markets fall.

Fund investment horizon

- GPF-G has a very long investment horizon
- Can bear short term risk better than investors with shorter horizons.
 - When cyclical **increase** in risk aversion – should **buy** (more) risky assets because are at a discount
 - When cyclical **decrease** in risk aversion – should **sell** (more) risky assets because are at a premium.
- Tactical Allocation – pays off over medium to long term.
- **But public oversight over short horizon work against this strategy**

Final thoughts and issues

- Little or no benefits from traditional stock selection active investment management:
 - At best can involve a small fraction of the fund.
 - Issue of monitoring and appropriate benchmarking.
- But should take advantage of fund size and long horizon:
 - To extract premiums for providing liquidity. (This apply as well to the passive component)
 - To take advantage of cyclical variation in risk aversion – market timing.
 - To get benefits from 'active' ownership



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- Professor of Asset Management, Norwegian School of Management, BI Oslo and TIAS Business School Tilburg University.
- From July 2005 to December, 2008, Director, Currency Strategies, Mellon Capital Management, San Francisco. Responsible for development & implementation of Global quantitative active currency strategies for large institutional investors.
- Previously, on faculty of the Marshall School of Business at USC, the Anderson School at UCLA, Caltech and the University of Michigan business school
- Extensive teaching and research experience in empirical asset pricing, international asset pricing, financial econometrics, asset allocation, currency markets and risk management
- Author of numerous finance and investment papers, including publications in the Journal of Finance, Journal of Financial Economics, and the Journal of Business
- Frequent speaker at seminars sponsored by academic and professional organizations such as the AFA, EFA, WFA, the European Central Bank, the Federal Reserve Bank and The Institute of Quantitative Investment Research (INQUIRE EUROPE)



Member of the executive committee of the European Finance Association

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Links

Ministry of Finance

- www.regjeringen.no/en/dep/fin

Government Pension Fund

- www.government.no/gpf

Norges Bank Investment Management

- www.nbim.no

Council on Ethics

- www.etikkradet.no



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